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Rhodora

JOURNAL OF THE

NEW ENGLAND BOTANICAL CLUB

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JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 33. August, 1931. No. 392.

NOTES ON SOME NEW YORK PLANTS

W. C. Muenscher and Bassett Maguire

(Plate 213)

During the summer of 1930 the writers had an opportunity to make observations on the distribution of a number of the less common plants in several localities, chiefly in northern New York. Notes are here recorded on a few of the collections made which appear to represent additions to the known flora of New York State, or because they extend our knowledge concerning the distribution of some species in the State.

Alisma Geyeri Torr. Mostly submerged in shallow water. Rather common in silt overlying bedrock along the St. Lawrence River: Chimney Island, Ogden Island, Waddington and Polly's Gut, St. Lawrence County; near the mouth of the St. Regis River, Franklin County. Previously reported from near Ogdensburg and Chaumont, Jefferson County.[1]

Rumex Acetosa L. This weed has been naturalized in a number of localities in New York. In Cortland and Broome Counties, in the valley of the Tioughniouga River, it is very abundant, especially between Blodgetts Mills and Whitney Point, a distance of about 20 miles. In early June many of the permanent or old meadows along this river appear reddish on account of the abundance of this weed.

Lychnis Flos-Cuculi L. Occurring as a weed in a clover field east of Marathon, Cortland County. In other localities in the State where this has become naturalized it occurs chiefly in moist meadows.

Erucastrum gallicum (Willd.) Schulz. A weed on waste ground near the dock in Plattsburg, Clinton County. Before 1920 this weed was known in this state only from Tompkins County. Since then the senior author has collected it in Cayuga County (1925), Livingston County (1926) and Erie County (1928).

Subularia aquatica L. This little submerged plant was found in fruiting condition in 3 to 7 decimeters of water off the north end of

[1] Fernald, M. L. and K. M. Wiegand. Rhodora 25: 205–214. 1923.

Piseco Lake, Hamilton County. Collected by *O. F. Curtis and L. H. MacDaniels*, October 11, 1930. Apparently not previously recorded from New York State.

Podostemon Ceratophyllum Michx. Forming a dense mosslike growth, attached by fleshy disc-shaped processes to rocks on the bottom of very swiftly running streams: rapids of the Grass River; below Massena, St. Lawrence County; rapids of St. Regis River below Hogansburg, in cascades of Chateaugay River below Chateaugay Chasm, Franklin County (Plate 213). Previously reported[2] only from Watertown (Gray, 1843), Newburgh (Halsted, 1843), and Oneida County (Haberer, 1905). This plant is apparently not as rare in New York State as the previous collections indicate; the inaccessibility of its habitat, in very swiftly running water, probably accounts for the few collections made. In the St. Regis River station the river had been diverted temporarily on account of some construction work for a power canal, so as to expose the bed rock. Between 2 and 3 acres of the river bottom were covered with almost a solid mat of Podostemon. The plants were mostly past the flowering stage, but fruits were abundant.

Euphorbia Cyparissias L. The production of seeds by this naturalized weed has been considered of rare occurrence.[3] In about 40 stations where this species was examined by the senior author, seeds were found in only three: along a roadside bank west of Potsdam, St. Lawrence County; on a sandy bank beside Bay Pond, Franklin County; on several adjoining farms between Cedarville and Columbia Center, Herkimer County. At the last station this species is a troublesome weed on at least 80 acres on one farm, not to mention the adjoining farms.

Hippuris vulgaris L. The submerged form was found associated with *Potamogeton pectinatus* L., *P. Richardsonii* (A. Benn.) Rydb. and *Vallisneria americana* Michx. in 1 to 3 meters of water in the St. Lawrence River; below Ogdensburg; Waddington, St. Lawrence County; between the mouths of the Raquette and St. Regis Rivers, Franklin County. Also in mud near shore in the last two localities. No flowers or fruits were found. Reported as infrequent across the northern part of the State.

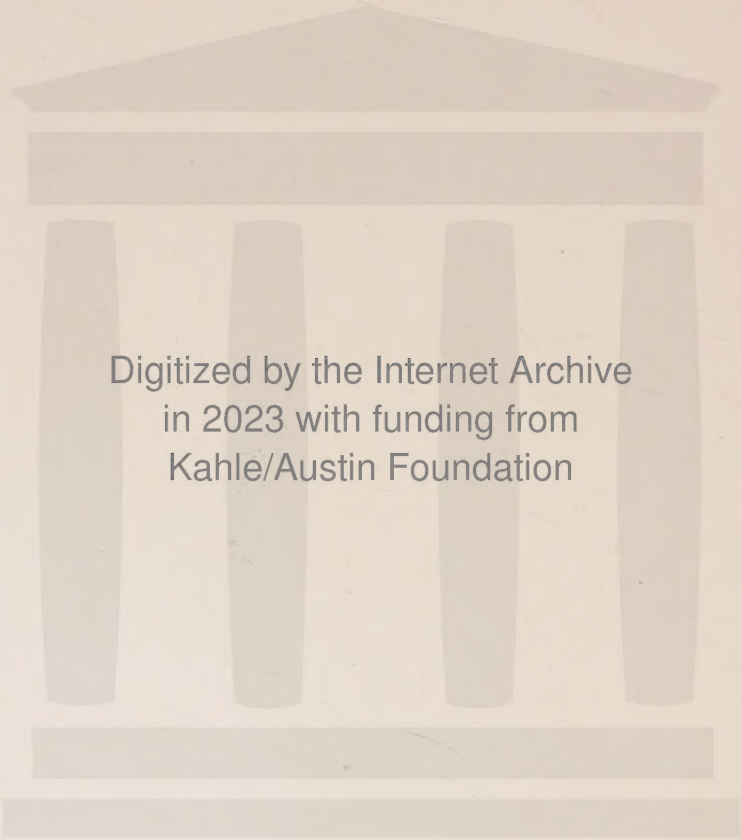
Myriophyllum Farwellii Morong. Specimens with fruits answering the description of this species were common in shallow water in Bradley Pond, Clinton County.

Odontites rubra Gilib. In sandy soil along roadside and in a field near a cemetery east of Chateaugay, Franklin County. Naturalized from Europe in northeastern Canada and Maine. Apparently not recorded previously from New York State.

Ambrosia psilostachya DC. This western weed was found well established over several acres in dry sandy fields and along both

[2] House, H. D. New York State Museum Bulletin 254: 375. 1924.
[3] Deane, W. Rhodora 12: 57–61. 1910.

PODOSTEMON CERATOPHYLLUM ON BED OF ST. REGIS RIVER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sides of the highway just north of Lake Clear Junction, Franklin County. Previously reported from Rochester.[1]

ARTEMISIA PONTICA L. This introduced plant was growing in a sandy pasture near Brasher Center, St. Lawrence County, forming solid clumps varying from 2 to 5 meters across and producing numerous panicles of flower heads. Ordinarily this species does not flower.

CIRSIUM ARVENSE (L.) Scop. var. VESTITUM Wimm. & Grab. A thistle answering the description of this variety has been common over about 5 acres of an abandoned field near Danby, Tompkins County. It was first observed in 1928. Only pistillate flowers are produced, suggesting that the entire colony probably was developed by vegetative propagation from a single plant.

HELIANTHUS MAXIMILIANI Schrad. Two large clumps of this western sunflower were found on waste ground near the upper end of the Massena Power Canal, St. Lawrence County.

IVA XANTHIIFOLIA Nutt. Growing luxuriantly about farm buildings and along the roadside near Massena Center, St. Lawrence County.

LEONTODON AUTUMNALIS L. Common in several meadows about 3 miles southwest of Malone, Franklin County.

MADIA SATIVA (Nutt). T. & G. In waste ground and in new grass seeding near the Power Plant, Massena, St. Lawrence County. Several large viscid-glandular plants nearly 1 meter high, with large heads capitate-congested at the ends of branches but with mature achenes. Probably referable to the var. CONGESTA T. & G. Common along the Pacific Coast where it is thought to have been naturalized from Chile. Apparently not previously reported from New York State.

Specimens of all of the collections recorded in these notes have been deposited in the herbarium of Cornell University.

CORNELL UNIVERSITY.

EXPLANATION OF PLATE 213

The bed of St. Regis River below Hogansburg, New York, exposed while the water was diverted through a power-canal. The dark moss-like carpet is *Podostemon Ceratophyllum*.

FURTHER ADDITIONS TO THE CONNECTICUT FLORA

EDWIN H. EAMES

THE following notes and records supplement the "Additions" published as Bulletin 48, Conn. Geol. and Nat. Hist. Survey, Jan., 1931, and unless otherwise stated are to be credited to the writer.

[1] House, H. D. New York State Museum Bulletin 254: 1924.

Lesser items may better form part of a composite publication in the future. Records new to the State are preceded by an asterisk if native, by a dagger if introduced.

*Polystichum acrostichoides (Michx.) Schott, f. **orbiculatum**, n. f., pinnis plerumque omnino vel fere orbicularibus, dentatis. Pinnae orbicular or nearly so, dentate. Darien, Fairfield County, 8 Oct., 1930, on a lightly wooded rocky hillside with normal plants, no. 11214 (type in Gray Herbarium). Typical fronds are 14–20 mm. broad, 15–30 cm. long. Most fronds show some more or less transitional pinnae which usually are irregularly disposed.

Lycopodium alopecuroides L. In addition to the station in Milford, this has been found in Fairfield where it formed a colony near a large area of *L. inundatum* L. and a tall slender form of var. *Bigelovii* Tuck. and without any intergradations.

*Potomageton microstachys Wolfg., var. subellipticus Fernald (Rhodora **32**: 82. 1930) occurs in Taunton Pond, Newtown, Fairfield County, where it was collected just after flowering 13 Aug., 1930, no. 11150 in Herb. Eames. This variety is not otherwise reported south of northern Vermont and the Adirondacks.

*Scirpus lineatus Michx., f. **elongatus**, n. f., spiculis elongatis, 12–18 mm. longis. Spikelets elonagted, 12–18 mm. long. Sharon, Litchfield County; also in New York at Southeast, Putnam County, 27 July, 1928, *Eames and Starr*, no. 10672 (type in Herb. Eames). In this species spikelets rarely exceed 10 mm., but in these collections the plants are attractively different.

*Arisaema pusillum (Peck) Nash, f. **pallidum**, n. f., spatha spadiceque omnino pallide viridibus. Spathe and spadix pale green throughout. Fairfield, 17 June, 1907, open sphagnum swamp bordering tidal meadows, no. 5646 (type in Herb. Eames). Many plants about the border of a large colony of the normal dark-colored type.

*Corallorrhiza odontorrhiza (Willd.) Nutt., f. flavida Wherry. Lip white, unspotted; plant otherwise greenish yellow throughout. Easton, Fairfield County, 20 Sept., 1928, rocky openly wooded slope, *W. I. Starr* (in Herb. Eames). This was examined while fresh. It is analagous to a form of *C. maculata* Raf.

This affords opportunity to note the occurrence of a branched phase of the typical form along a wood-border in Fairfield, 8 Sept., 1903, nos. 4078, 4079. In two straggling disconnected colonies were many plants each with one flowering branch from the uppermost bract. These branches each had a well-formed exserted bract and a small spike of flowers. The form was dominant in each area:

*Salix petiolaris J. E. Smith, occurs in a boggy swamp in Danbury, with *S. serissima*, *S. candida* and a sparse representation of *S. candida* var. *denudata* Anders. which is otherwise known in Connecticut only from Salisbury.

*Dicentra Cucullaria (L.) Bernh., f. **purpuritincta**, n. f., corolla rosea, flexura saturate aurantiaca, calice rubescenti-purpureo. Corolla pink, deep orange at flexure; calyx reddish purple. Westport, Fairfield County, 20 April, 1928, in rich deep soil of moist wooded slope, *Eames and Starr*, no. 10561 (TYPE in Herb. Eames). This form occurs at a number of stations in southwestern Connecticut, nearly always in colonies of the typical form into which it grades. The purple coloration strongly pervades scape and appendages.

*Saxifraga virginiensis Michx., f. **plena**, n. f., floribus multiplicibus, albis. Flowers double, white. Kent, Litchfield County, 3 May, 1908, on a ledge with several similar plants, *Hugh Mosher* (TYPE in Gray Herbarium). Double-flowered plants have been reported from Woburn, Massachusetts and from Pennsylvania by Meehan[1] and by Sterns.[2] Leggett[3] reported it from Greenburg, Westchester County, New York.

†Spiraea hypericifolia L. forms a large and evidently long established colony on a dry, open, rather barren roadside in Brookfield, Fairfield County. Pursh knew this species in "Can. and N. Y." and Muhlenberg from "N. Y.," according to Beck.[4]

*Lupinus perennis L., f. rosea Britt. occurs in several colonies of the typical form in Brookfield, also in Danbury.

†Wisteria frutescens (L.) Poir. has spread freely over a considerable area on West Rock, New Haven, where it has been planted along a roadway.

†Parthenocissus tricuspidata (Sieb. & Zucc.) Planch. is rare or occasional in wastes and on banks in the southwestern part of the State. Starlings eat the fruit and may be responsible for its dissemination, at least in part.

*Viola sororia Willd., f. Beckwithii House, with white petals, occurs plentifully in a colony, essentially all of this form in its purity, in Kent.

†Teucrium Botrys L. Dry rocky bank, in limestone soil, at Kent. Local and rare.

†Satureja Acinos (L.) Scheele. Dry upland pasture, Sherman, Fairfield County.

*Pentstemon hirsutus (L.) Willd. f. albiflorus Farwell. Flowers white; stem and leaves green. Kent, with the typical form, which usually is strongly suffused with purple throughout, no. 10225, 22 June, 1927.

*Castilleja coccinea (L.) Spreng., f. lutescens Farwell. Upper part of floral bracts and tip of sepals yellow; plants otherwise pale green throughout. Sherman, Fairfield County, 10 May, 1903, *Austin and Eames*. Though rather rare or local, this form is widely dis-

[1] Am. Nat. Aug. 1872 & 1877, also in Native Fl. & Ferns 1: 76. 1878.
[2] Bull. Torr. Cl. 14: 122. 1887.
[3] Bull. Torr. Cl. 3: 39. 1872.
[4] Bot. N. & Mid. States, 99. 1833.

tributed, usually in colonies with the type. Also in eastern New York, where also a transition state, pale salmon in color, has been collected at South Salem by *W. I. Starr* (Herb. Eames).

†Galium verum L., f. albidum (Hartm.) Lindm., in which the flowers are of palest yellow, was plentiful with the typical form in grassland at one locality in Stratford and in a meadow at Wilton, Fairfield County.

†Galium Mollugo L., f. ochroleucum Koch. Flowers pale yellow, brighter in bud. Grassy hillside, Bethel, Fairfield County, forming a large clump, 20 June, 1929, no. 10932.

† × Galium ochroleucum Wolff. (*G. Mollugo* × *verum*). With its pale yellowish flowers this hybrid was found in several colonies in an extensive meadow at Wilton, Fairfield County, with both parents, 30 June, 1930, no. 11099.

†Sambucus nigra L. Several large shrubs, long persistent, on waste land in Bridgeport.

†Rudbeckia hirta L., f. viridiflora S. H. Burnham. Several plants in a dry old pasture, New Fairfield (*W. I. Starr*).

†Guizotia abyssinica Cass. Found sparingly along a roadside in Westport in 1927 and a small number of bushy plants scattered over a tract of waste land in Bridgeport in 1930. It flowered abundantly at the latter station but was killed by frost without having matured any seeds, indicating a precarious existence which must have been more favorable in other years. Native of southwestern Asia and northeastern Africa.

†Sonchus arvensis L., var. glabrescens Gunth., Grab. and Wimm. Abundant in a wet meadow, Redding, Fairfield County.

I am greatly indebted to Mr. C. A. Weatherby for assistance in the identification of doubtful plants in this list.

Bridgeport, Connecticut.

The Occurrence of Phragmites communis in western Washington and Oregon.—The reed, *Phragmites communis*, occurs only in scattered localities in western Washington and Oregon. The writer had been engaged in field work in Washington for twenty years when, in July, 1929 (in company with Dr. A. P. Dachnowski-Stokes), he first found this plant growing west of the Cascade Mountains.

At this time a vigorous patch of this plant, covering an area about 500 by 100 feet, was found growing along Mercer slough east of Lake Washington and only a few miles from Seattle. Peat formed by this reed was found in the cultivated area bordering this patch of growing

plants. Lake Washington and the waters of this slough were lowered seven feet in 1916 at the time of the opening of the ship canal, and the growth of this plant in this place had evidently been more extensive before the lowering of the water level.

Specimens were collected at this place by the writer in August, 1929, and these have been identified at the U. S. National Herbarium, the Missouri Botanical Garden, the New York Botanical Garden, and the Field Museum of Natural History. A specimen has been deposited at each of these places and also in the herbarium at the Museum of the University of Washington. It was found that there was already a specimen in this herbarium collected at "Lake Washington" October, 1916, by Mr. Kahan.

Correspondence and consultation with other botanists has brought out the fact that it has been collected at two other places in western Washington (Ilwaco, 1885, and Lake Ozette, 1927) and at four places in western Oregon (Sauvies Island, 1877; Blind Slough, Clatsop County, 1903; Brooks, Marion County, 1922; Lake Labish, 40 miles south of Portland, 1929).

Mr. W. N. Suksdorf, of Bingen, Washington, who has collected plants in the state for more than forty years, writes that he has never collected this species west of the Cascades. He states that the plant formerly occurred at Bingen but disappeared years ago as the land was brought into cultivation, and that he knows of only one place (8 miles west of Bingen) where it is abundant now.

Mr. J. B. Flett, who has also collected in Washington for many years, writes that he has never seen this species in western Washington.

The experience of these two botanists and of the other botanists who have kindly contributed information confirms the experience of the writer and indicates that this reed has played a much smaller part in the development of plant communities in western Washington and Oregon than it has in many other parts of North America.—George B. Rigg, University of Washington, Seattle.

Plantago arenaria W. & K. at Portland, Maine.—In September 1929, the writer found a single plant, about two feet tall, of *Plantago arenaria* growing on an extension of Hersey Street in Portland. In the spring this part of the street had been filled with material

scraped from other streets nearby, though it was not possible to learn more definitely of the places from which the material had been taken. A hundred and more feet away from the plant, a gulley was being filled with discarded packing cases, automobiles and other matter; no plants were seen in that section.

The plant mentioned was flowering abundantly and producing seed.

In the season of 1930, about a dozen of the plants reached maturity within an eight-foot circle of the original plant, but none were found farther away. These flowered profusely and bore seed.

This plant seems to require a long season, not flowering until late summer or early fall. On November 15 it was observed that many seeds had matured, yet many capsules contained unripe seeds, and the fleshy leaves had been withered by the freezing nights of the first week of the month. The large, shining dark brown seeds (two in number) would seem likely to offer choice morsels to seed-eating birds.

The success or failure of this pioneer, in its attempt to establish itself in this region will be watched with interest for the next few years. —Arthur H. Norton, Portland Society of Natural History.

THE GENUS GEUM IN THE ATHABASCA-GREAT SLAVE LAKE REGION[1]

Hugh M. Raup

Recent botanical surveys in the Athabasca-Great Slave Lake district have yielded a number of specimens of *Geum* which are not determined easily, and which seem to warrant a somewhat critical examination of the genus as it is there represented. The writer's collections may be divided into three groups, the two smaller of which are clearly *G. strictum* Ait. and *G. triflorum* Pursh. The largest group, involving 18 numbers and 58 sheets, is equally well-defined, but consists of plants with their upper stem-leaves considerably reduced and their basal leaves supplied with a large, ovate to cordate terminal leaflet after the manner of *G. macrophyllum*. Further characteristics of these plants are pale yellow obovate petals, receptacles loosely covered with very short hairs but not covered so as to obscure the rather elongated pits, the lower internodes of the styles loosely supplied with

[1] Published by permission of the Director of the National Museum of Canada, and during the writer's tenure of a National Research Fellowship in the Biological Sciences.

minute stalked glands, and the calyces and peduncles of the flowers and fruits with small stalked glands interspersed among the abundant short hairs. The plants are most common on meadow shores of lakes and streams and in upland semi-open prairies.

The specimens in question match closely in all of the above characters those in the Gray Herbarium labeled by Rydberg *G. oregonense* (Scheutz) Rydb., and also the type and several characteristic specimens of *G. perincisum* Rydb. loaned to the writer from the Herbarium of the New York Botanical Garden. After study of his own material and that just mentioned the writer has been unable to separate these two species. The serration of the leaflets and the shape ("rounded or reniform" vs. "rhombic, ovate, or subcordate") of the terminal leaflet of the basal leaves, used by Dr. Rydberg[1] as definitive characters do not appear reliable, especially in a group where leaf form is so notably variable.

The name *oregonense* was first used by Scheutz[2] in naming a fragmentary specimen from the Oregon region of North America. He considered it a subspecies of *G. urbanum* L., a European species which is now known to occur only as an introduction in eastern North America. Rydberg[3] assumed this fragment to be identical with some of his undetermined northwestern specimens and accordingly named them *G. oregonense*. Since the specimen cited by Scheutz consists of only the upper parts of the stems and has no mature fruits, some character other than those commonly used became necessary before it could be adequately separated from its near affinities. Rydberg[4] uses for this the shape of the upper stem leaves and the form of the inflorescence, neither of which appears to suffice in the material at hand. The tendency toward reduction and increased dissection of the upper stem leaves may be found in typical eastern *G. macrophyllum*, especially in specimens from the northern parts of the range. The form of the inflorescence is also extremely variable in typical *G. macrophyllum*, depending upon the age of the plant and its habitat. In all of the material, however, the presence of minute stalked glands on the peduncles has served to separate the specimens in question from *G. macrophyllum* which is without such glands. Dr. Gunnar Samuelsson, at Stockholm, has very kindly examined the original specimen cited

[1] Rydberg, P. A. *North American Flora* xxii. 402 (1913).
[2] Scheutz, N. J. *Prodr. Monogr. Georum* 26 (1870).
[3] Rydberg, P. A. Bull. Torr. Bot. Club xxv. 56 (1898).
[4] Rydberg, P. A. *North American Flora* xxii. 401 (1913).

by Scheutz, and states that the sheet contains four flowering tops, one with young fruits, collected by Captain Waerngren. He also compared it with two specimens apparently corresponding to *G. oregonense* Rydberg. The latter showed very prominent stalked glands, while on the Waerngren specimen these were completely lacking. Dr. Samuelsson states that the fragments are not from *G. strictum* and expresses the opinion that they are from *G. macrophyllum*.

The type-specimen of *G. perincisum* Rydb.[1] was collected by W. C. McCalla at Banff, Alberta, and as stated above matches the writer's material as well as that labeled *G. oregonense*. The question whether *perincisum* constitutes a species, however, requires further analysis before the name may be properly applied.

When compared with typical specimens of the two related wide-ranging species of the continent, *G. macrophyllum* and *G. strictum*, the close resemblance in essential characters between *G. perincisum* and *G. macrophyllum* is very marked. The receptacles of the fruiting heads, covered with very short hairs and having a distinctive arrangement of the pits, are scarcely distinguishable in the last two categories, while in *G. strictum* the receptacle is so covered with longer hairs as to obscure the pits. The lower internodes of the styles in the young and mature fruits of both *perincisum* and *macrophyllum* are supplied with minute stalked glands which are entirely absent in *G. strictum*. The general form of the basal leaves in *perincisum* strongly resembles that in *macrophyllum* in having a prominent terminal leaflet of rounded outline, and reduced lateral leaflets. It should be noted further that the major differences by which the two are separated are rather variable in themselves, and are in characters which are notable for their instability in this genus.[2] The deeper lobing in the terminal leaflet of the basal leaves, the reduction of the upper stem leaves, the glandularity of the peduncles, and a tendency toward lack of hairs on the faces of the achenes are the characters in *G. perincisum* which distinguish it from *G. macrophyllum*.

The geographic ranges of the two forms are also significant. Material in the Gray Herbarium and in the Herbarium of the New England Botanical Club has been used to supplement the writer's own and that obtained from the New York Botanical Garden to form the accompanying maps (Figs. 1 and 2).[3] *G. macrophyllum*, originally

[1] Rydberg, P. A. *North American Flora* xxii. 405 (1913).

[2] Fernald, M. L. and Weatherby, C. A. *Varieties of Geum canadense*, Rhodora xxiv. 47 (1922).

[3] Base map by J. Paul Goode, published by the Univ. of Chicago Press.

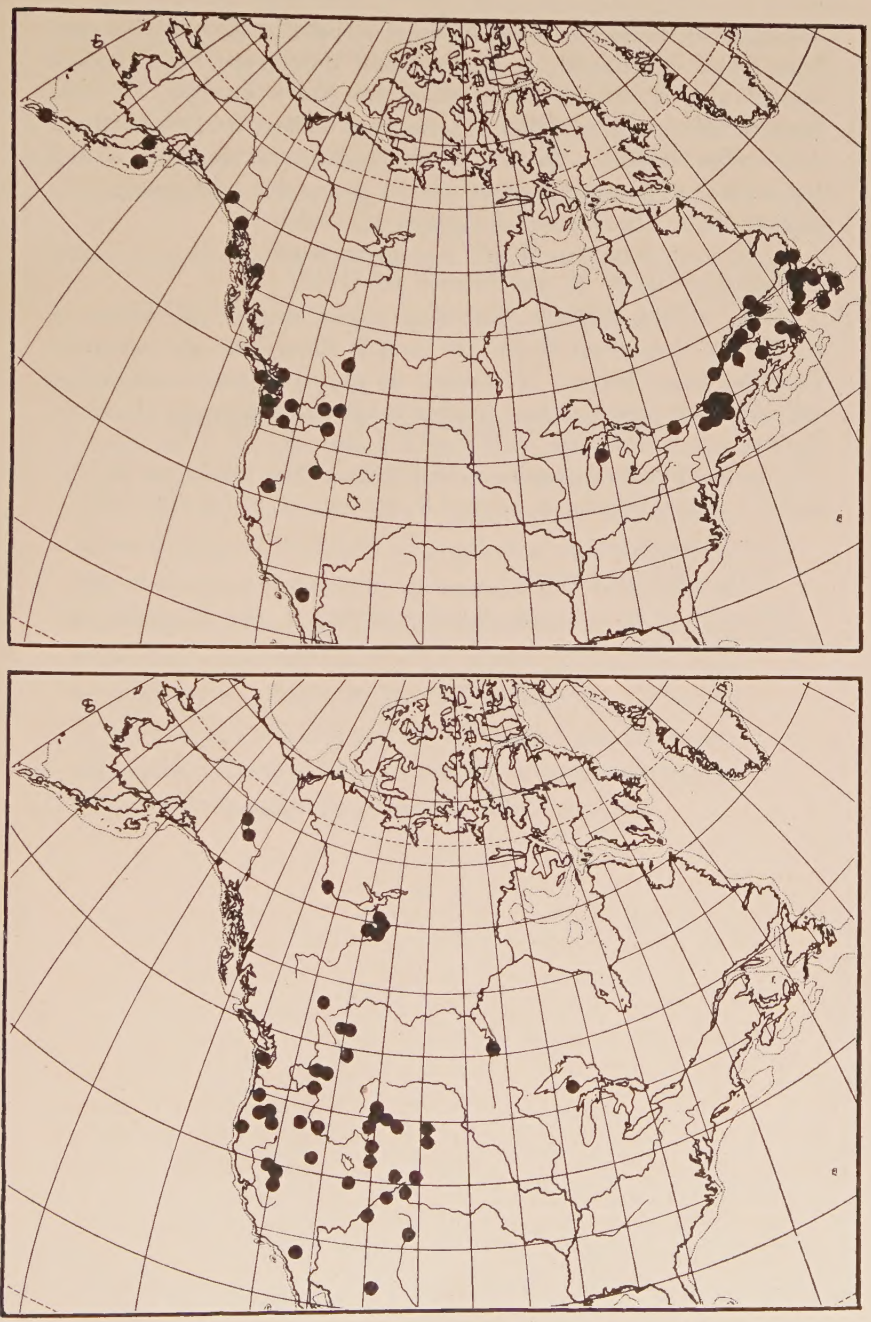

Fig. 1 (upper), Range of GEUM MACROPHYLLUM. Fig. 2 (lower), Range of G. MACROPHYLLUM, var. PERINCISUM.

described by Willdenow from material secured in Kamtchatka, has been found subsequently to be consistent throughout the Canadian forest region of eastern and northwestern North America. It is of interest, however, to find that *G. perincisum* replaces it in the northern and western interior. In view of the fundamental similarity of the latter plant to *G. macrophyllum*, and its geographic relationship, it is proposed that it be considered a geographic variety:

Geum macrophyllum Willd., var. **perincisum** (Rydb.), n. comb. *G. perincisum* Rydb. N. Am. Fl. xxii. 405 (1913).

In the Athabasca-Great Slave Lake region the var. *perincisum* is by far the commonest *Geum*. It extends throughout the subarctic Canadian forest district. *G. strictum*, on the other hand, is limited to the semi-open prairie districts and to cabin and settlement clearings, the two places where the more southern elements are to be found in this flora. *G. triflorum* grows on the driest of the semi-open prairies and has a range similar to that of *G. strictum*.

Gray Herbarium,
Harvard University.

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NOTICE TO CONTRIBUTORS

In accordance with the Editorial Announcement of March, 1931, that Rhodora will follow the provision of the International Rules of Botanical Nomenclature, that the publication of names of new groups will be valid only when they are accompanied by a Latin diagnosis, contributors are notified to see that all new species or other groups proposed by them for publication in Rhodora have Latin diagnoses. If desired by contributors, the Editoral Board of Rhodora will undertake (with charges at cost for matter of considerable length) to have their English diagnoses converted into Latin.

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